

January 17, 2000

Dockets Facility
United States Department of Transportation
Room PL-401
400 7th St., S.W.
Washington, DC 20590-0001
[By e-mail]
Re: Docket No. RSPA-99-6355; Notice 1

Brooklyn Union Comments - DOT's Request for Comment Regarding Pipeline Safety: Enhanced Safety and Environmental Protection for Gas Transmission and Hazardous Liquid Pipelines in High Consequence Areas (dated October 21, 1999)

Dear sir/madam:

Brooklyn Union and Brooklyn Union of Long Island, are natural gas distribution subsidiaries of KeySpan Energy, Inc. These companies serve 1.6 million customers in Brooklyn, Queens, Staten Island, as well as all of Nassau and Suffolk Counties. We have reviewed DOT's Notice of Public Meeting and Request for Comments Regarding Enhanced Safety and Environmental Protection for Gas Transmission and Hazardous Liquid Pipelines in High Consequence Areas, published on October 21, 1999, and are pleased to provide joint comments.

We participated in the development of the comments filed by the American Gas Association and the New York Gas Group. We support both of those filings. The brief comments offered here should be considered as additional.

The design, construction, operation and maintenance of gas transmission lines in our territory have all been geared toward the risks prevalent in our area, and the consequences of any failure. The customization of these designs and field activities to our operating area is a critical component of any risk assessment we perform, and has a strong influence on the types of inspections that prove practicable, informative, and cost effective. Any future requirements aimed at decreasing the risk or lessening the consequences of a gas transmission line failure must have the flexibility to allow multiple means of achieving the goal. The role of a rigorous damage prevention programs must also be accounted-for.

Flexibility is key. Some members of the public have suggested imposition of mandatory in-line inspection (smart pigging) requirements for gas transmission lines. We have argued against this repeatedly because within metropolitan areas, smart pigging remains impracticable. Most transmission line segments in our territory are incompatible with current pigging technology due to piping configurations, restrictions, valve types, sizes and spacing, and fitting types. When in-line inspection is feasible on our system, it is unusually expensive. Nevertheless, we have used smart pigs on several segments of our system, generally as a supplement to other forms of testing, or where there has been reason to believe that a specific line might benefit from such an inspection. We have also performed hydrostatic tests on some existing lines when we felt the tests were justified, but this too is a very expensive proposition in our operating area.

Smart pigs and hydrostatic testing must be placed in the context of a suite of methods, tools and techniques available. These include close interval pipe-to-soil potential surveys, current requirement testing, coating resistance testing, and the review of leak, corrosion control and patrolling records. We carry out careful inspections and tests of exposed transmission line piping as well. KeySpan supports development of emerging integrity assessment technologies, such as stray current mapping, current attenuation surveys, materials testing on sections of piping removed from service, as well as newly proposed intelligent, in-line inspection techniques. We also support ongoing research programs devoted to the development and application of pipeline repair methods and apparatus. There is no single test to assure pipeline integrity.

Another often cited concern is stress corrosion cracking. We feel that this is less of a concern in our territory than it may be elsewhere. Our transmission lines are designed to operate at relatively low stress levels; many are just barely within the definition of Transmission line. It has been well established that operation at a low percentage of SMYS greatly reduces the probability of failure due to rupture, and makes the probability of failure due to stress corrosion cracking virtually non-existent. For the very small number of cases where KeySpan pipelines are allowed to operate at stress levels at or above 40% of SMYS, they are only allowed to do so because of the class location that they are situated in.

Finally, this docket does not explicitly address the distinction that should be drawn between natural gas transmission lines and hazardous liquid pipelines. The ongoing effort to align code requirements for gas and liquid lines should not extend beyond the point where the nature of the products involved clearly differ. Liquids travel downhill and often invade groundwater systems. Natural gas rises from its source and tends to dissipate. No release of gas or a hazardous liquid can be taken lightly. Still, they should not be treated the same. The risks associated with each, as well as the consequences should be treated separately.

We respectfully submit these comments in the hope that they will be helpful. Should you have any questions related to this submission, please do not hesitate to contact us.

Sincerely,

Arthur A. Shapiro, Director of Codes and Standards
Dennis P. Clini, Senior Engineer, Gas Planning and System Integrity
Brooklyn Union, a KeySpan Energy Company